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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,102	03/11/2004	Shinji Baba	Q80311	4590
23373	7590	06/06/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			COMAS, YAHVEH	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/797,102

Applicant(s)

BABA ET AL.

Examiner

Yahveh Comas

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments, see pages 8-15, filed 3/13/2006, with respect to the rejections of claims 1-19 under 35 USC 103 (a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground of rejection is made in view of Uchiyama U.S. Patent No. 5,767,601.

### ***Claim Rejections - 35 USC § 103***

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchiyama U.S. Patent No. 5,767,601 in view of Koehly et al. U.S. Patent No. 3,196,304 in further view of Wong et al. U.S. Patent No. 5,304,885.

Uchiyama disclose a flywheel having a cylindrical portion and rotating about a rotation axis, a plurality of magnets disposed on an inner circumferential surface of the cylindrical portion of the flywheel and rotating together with the flywheel; a stator core having a laminated core formed by a plurality of magnetic thin plates, the laminated core having an annular portion and a plurality of teeth projecting from the annular portion outward and opposed to the plurality of magnets. Uchiyama disclose the claimed invention except for said stator having two end plates that are made of metal material and disposed on both sides of the laminated core and a second portion of the end plates that is laid on the second portion of each of the teeth.

Regarding the stator having two end plates made of metal material and disposed on both sides of the laminated core, Koehly discloses a flywheel (10) having a

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cylindrical portion and rotating about a rotation axis; a plurality of magnets disposed on an inner circumferential surface of the cylindrical portion of the flywheel and rotating together with the flywheel; a stator core (L) having a laminated core formed by laminating a plurality of magnetic thin plate, the laminated core having an annular portion and a plurality of teeth (T) projecting from the annular portion outward and opposed to the plurality of magnets; and a plurality of generation coils (W), each of generation coils wound on the respective teeth of the laminated core, wherein: the stator core (L) has two end plates (34) that are made of a metal material and disposed on both sides of the laminated core in such a manner that the laminated core is sandwiched in between; each of the teeth of the laminated core has a first portion (34) extending in a radial direction and a second portion projecting in a circumferential direction from an outer end of the first portion on both sides thereof; at least the first portion of each of the two end plates is smaller in circumferential width than the first portion (34) of each of the teeth (T), each of the two end plates has a first portion that is laid on the first portion of each of the teeth (T) made of a non-magnetic metal material such as aluminum.

Regarding the stator having a second portion of the end plates that is laid on the second portion of each of the teeth, Wong discloses a winding end protection (10) having a first (20) and a second portion (24) laid on a teeth stator having an smaller circumferential width than the second portion of each of the teeth wherein the second portion is made of a non-magnetic material in order to reduce the build up of dust.

Therefore, it would have been obvious to one having skill in the art at the time the invention was made to provide stator having two end plates made of metal material and disposed on both sides of the laminated core as disclosed by Koehly, and a second portion made of non-magnetic material as disclosed by Wong since that would had been desirable protect the winding from damage and also reduce the build up of dust.

Regarding claims 5-7, 9 and 18-19, Koehly disclose the use of non-magnetic material for the end plates in order to protect the winding, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to use stainless steel, since it has been held to be within the general skill of the worker in the art to select a know material on the basis of its suitability for intended use as matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Regarding claim 10, it would have been an obvious matter of design choice to provide a thinner end plate, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Regarding claim 13-14 and 16-17, Koehly disclose the use of an axial chamfered projection (39) located at the end of each cast rib (15) in order to provide an abutment or stop for wiring (page 4, column 60-67). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to provide stator having two end plates wherein the a project portion that projects from the second portion of a respective tooth since that would had been desirable to provide an abutment or stop for wiring.


***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yahveh Comas whose telephone number is (571) 272-2020. The examiner can normally be reached on 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

YC

  
DARREN SCHUBERG  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER